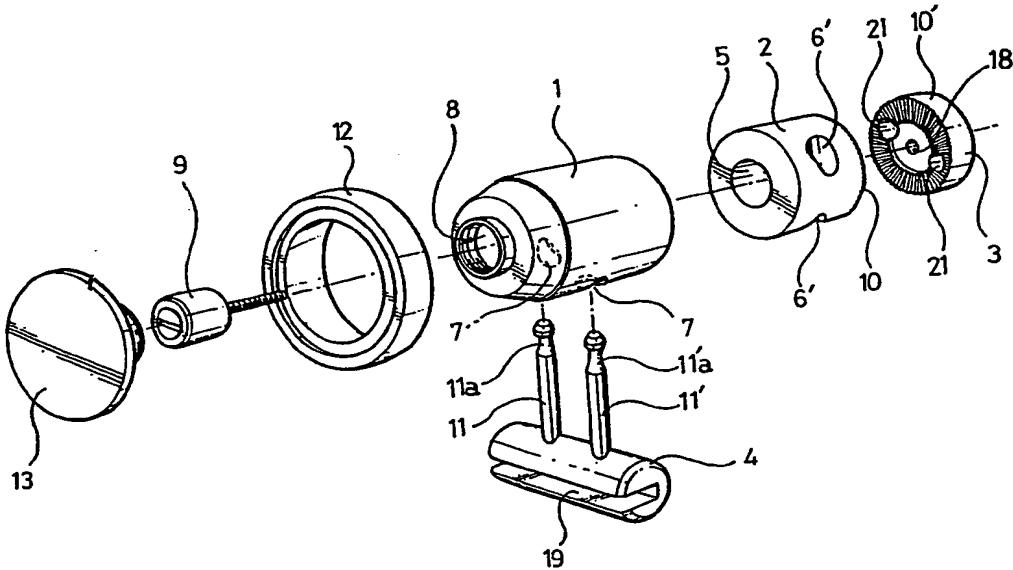




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(54) Title: HANGER FOR USE IN BATH ROOM



(57) Abstract

A hanger-support for use in bath room to hang or support various articles such as towels and the like is disclosed. A securing member (3) is secured on the wall of the bath room, and a subassembly consisting of a connecting member (2), an outer case (1) and a hanging member (4) is secured to the securing member by means of a bolt (9). The hanging member is provided with a pair of legs (11, 11'), and these legs are inserted into the leg insertion holes (6, 6', 7, 7') formed on both the outer case and the connecting member. Further, the legs of the hanging member are respectively provided with neck portions (11a, 11'a) through which the head of the bolt (9) is passed to secure the hanging member to the connecting member. The device of the present invention provides multiple functions with a single unit, and therefore, it serves for the usefulness and the aesthetic aspect of the bath room.

DescriptionTitle of the invention

HANGER FOR USE IN BATH ROOM

Field of the invention

The present invention relates to a bath room hanger
5 which is an accessory of a bath room, and which is for
hanging various articles such as towels.

Background of the invention

Conventionally, a bath room is provided with various
hangers or shelves for hanging or positioning various
10 articles such as towels, toilet papers, soaps and the
like. Such hanging and positioning means have differ-
ent shapes and separate entities, and therefore, these
devices are imperfect in their natures, without having
integral functions. Further, they deteriorate the
15 aesthetic feature of the bath room, and, in the case
where any one of these devices is lost or damaged, its
replacement is difficult.

Summary of the invention

The present invention is intended to overcome the above
20 described disadvantages of the conventional devices.

Therefore, it is the object of the present invention to

provide a universal positioning/hanging device which is used in a bath room for hanging and positioning various articles such as towels, soaps and the like.

Brief description of the drawings

5 The above object and other advantages of the present invention will become more apparent by describing in detail the preferred embodiment of the present invention with reference to the attached drawings in which:

Figure 1 is an exploded perspective view of the device 10 of the present invention;

Figure 2 is a longitudinal sectional view of the device of the present invention, showing its installed state;

Figure 3 is a sectional view taken along the line A-A 15 of Figure 2; and

Figure 4 illustrates the using states of the device of the present invention, in which:

Figure 4A illustrates the case where the device is used as a towel hanger;

20 Figure 4B illustrates the case where the device is used as an illuminating means; and

Figure 4C illustrates the case where the device is used as a soap support.

Description of the preferred embodiment

The hanger-support according to the present invention is for installing on the wall of a bath room. The hanger-support according to the present invention is constituted such that: a connecting member 2 is provided with a bolt insertion bore 5, and leg insertion holes 6,6' partially open to the bolt insertion bore 5; the connecting member 2 is inserted into an outer case 1 having holes 7,7' and a threaded hole 8; a hanging member 4 having a certain function is inserted into the hole 7,7' of the outer case 1; a bolt 9 is inserted through the threaded hole 8 of the outer case 1 so as for the bolt head of the bolt 9 to be coupled with the hanging member 4; and a securing member 3 is threadably coupled with the threaded portion of the bolt 9 across the connecting member 2.

Further, annular teeth portions 10,10' are formed respectively on the matching faces of the connecting member 2 and the securing member 3 so as for the joining strength to be reinforced. The hanging member 4 is provided with parallel legs 11,11' on each of which a neck portion is formed. The head of the bolt 9 passes through between the neck portions of the legs 11,11' in

such a manner that the hanging member 4 should be secured by the head of the bolt 9.

In the drawings, reference code 14 indicates a toilet paper, 15 a towel, 16 a lamp, 17 a soap, 18 a threaded 5 hole, 19 a slot for securing a toilet paper hanger, 20 a fastening screw, and 21 holes for driving threaded nails.

The device of the present invention constituted as above will now be described as to its assembling and 10 disassembling processes referring to Figure 1. First, the securing member 3 is placed at a proper position on the wall of a bath room, and then, threaded nails are driven into the holes 21 of the securing member 3, thereby fixing the securing member on the wall.

15 Then, the connecting member 2 is inserted into the outer case 1 in such a manner that the bolt insertion bore 5 of the connecting member 2 should be directed toward the threaded hole 8 of the outer case 1. Thus there is brought a state such that the holes 7,7' of 20 the outer case 1 are matched with the leg insertion holes 6,6' of the connecting member 2. Then the legs 11,11' which are parallelly installed on the hanging member 4 in an integral form are inserted into the holes 7,7'.

Then this subassembly is fitted to securing member 3 which has been attached to the wall of a bath room, and then, the bolt 9 is threadably driven into the thread hole 18 of the securing member 3 through the threaded hole 8 of the outer case 1, thereby firmly fixing the connecting member 2 to the securing member 3. Thus the connecting member 2 is not only secured to the securing member 3 by means of the bolt 9, but also the head of the bolt 9 passes through between the neck portions 11a,11a' of the legs 11,11' of the hanging member 4, thereby securing the hanging member 4 to the connecting member 2.

Then a handle 12 is fitted to the tapered portion of the outer case 1, and then, a covering cap 13 is 15 threadably secured into the threaded hole 8 of the outer case 1. Here, the handle 12 performs the role of firmly tightening the covering cap 13 and loosening it. That is, in a state with the covering cap 13 tightened to a certain degree, if the handle 12 is 20 turned rightwardly, then the covering cap 13 which is threadably joined with the threaded hole 8 of the outer case 1 to a certain degree is turned in the same direction due to the frictional force, with the result that the covering cap 13 is firmly tightened.

25 On the other hand, if the handle 12 is turned leftward-

ly, the frictional rotating force works to loose the thread of the covering cap 13, with the result that the covering cap 13 is loosened. Then the covering cap 13 can be held by hand to turn and detach it out.

5 The disassembling of the device of the present invention can be performed by applying a reverse process.

Meanwhile, the device according to the present invention provides multiple functions with a single device. That is, if only the hanging member 4 is replaced as 10 shown in Figures 2 and 4, the desired function is obtained. If a toilet paper member is put, it serves as a toilet paper hanger, and if a towel hanger is attached, it serves as a towel hanger. Further, if an illuminating means such a lamp is attached, it serves 15 as a lamp support, while, if a soap shelf is attached, it serves as a soap support.

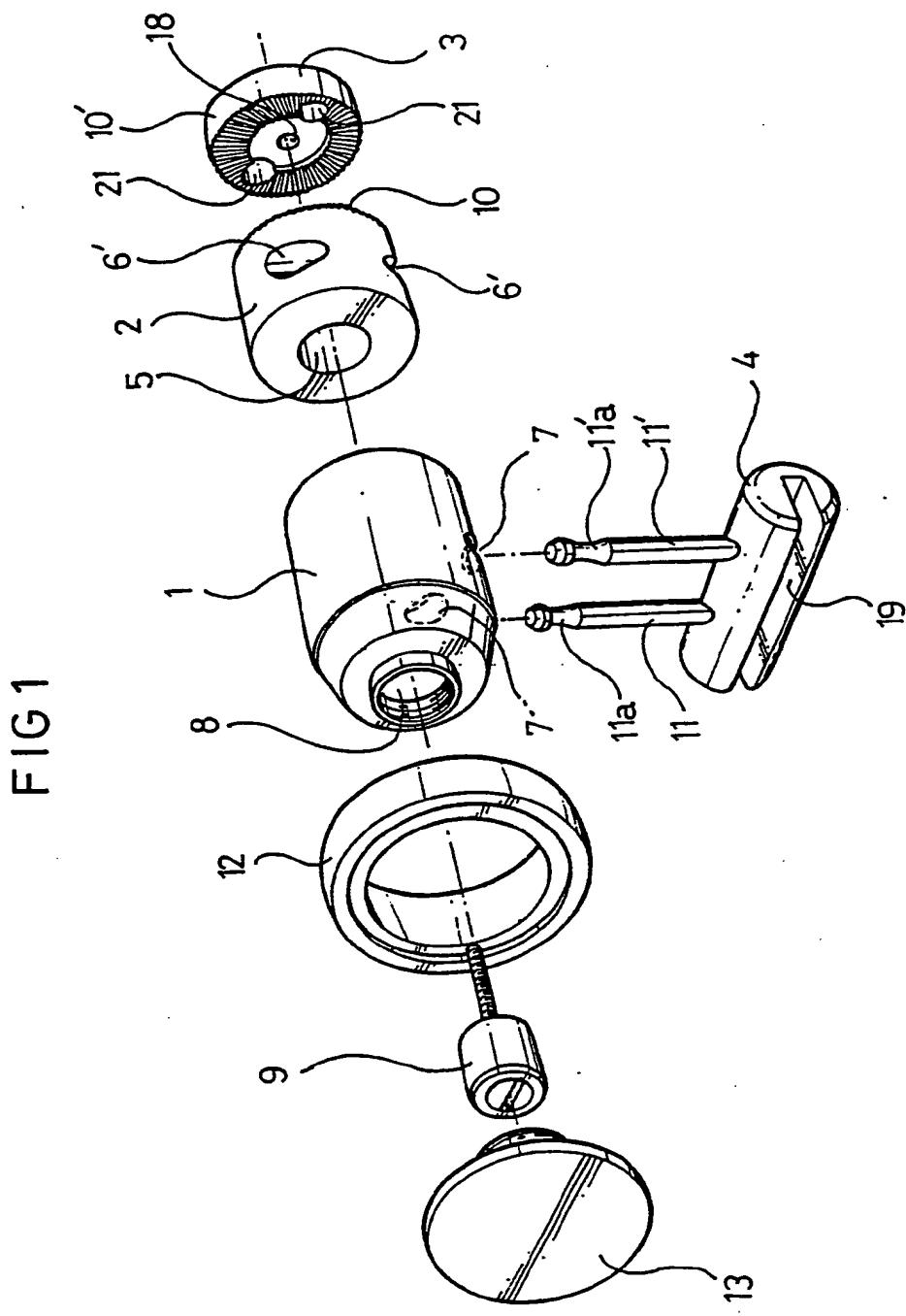
Thus, the device of the present invention has the advantage that it can provide multiple functions with a single device. Further, the device of the present 20 invention promotes the aesthetic feature of the bath room as one set of it is enough for a bath room, as well as having usefulness. Further, when a damage occurs, the replacement is easy.

What is claimed is:

1. A hanger-support for being used in a bath room in a state secured on the wall of the bath room, comprising:
 - 5 a connecting member 2 having a bolt insertion bore 5 and a pair of leg insertion 6,6' formed on the circumferential portion thereof, said leg insertion holes 6,6' being partially open to said bolt insertion bore 5;
 - 10 an outer case 1 for receiving said connecting member 2, and provided with a threaded hole 8 and a pair of leg insertion holes 7,7', said leg insertion holes 6,6' of said connecting member 2 being matched with said leg insertion holes 7,7' of said outer case 1;
 - 15 a hanging member 4 having a certain function, and for being inserted into said leg insertion holes 6,6', 7,7';
 - 20 a securing member 3 for being attached on the wall of the bath room; and a bolt 9 for being inserted into said threaded hole 8, and for being fastened into a threaded hole of said securing member 3 so as for said outer case 1 and said connecting member 2 to be fastened to said securing member 3.
2. The hanger-support for being used in a bath room as claimed in claim 1, wherein the matching faces of said connecting member 2 and said securing member 3 are provided with annular teeth portions for reinforcing the coupling between said two members.
- 25 3. The hanger-support for being used in a bath room as

claimed in claim 1, wherein said hanging member 4 is provided with a pair of legs 11,11' having respectively neck portions so as for the head of said bolt 9 to pass through between said neck portions to firmly secure said hanging member 4 to said connecting member 2.

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FIG 3

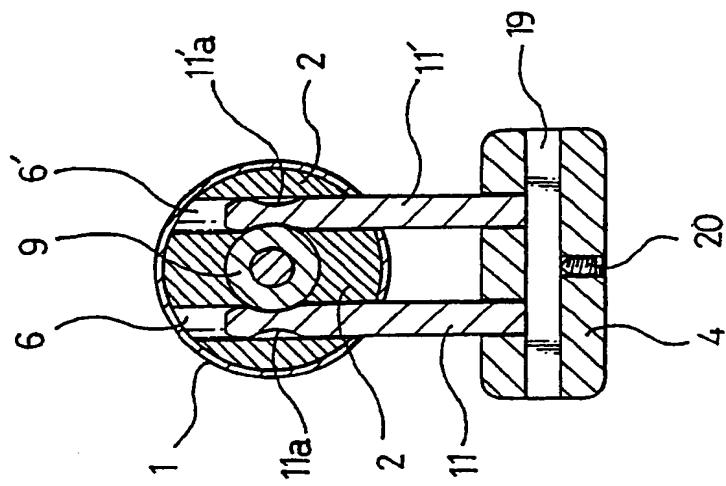
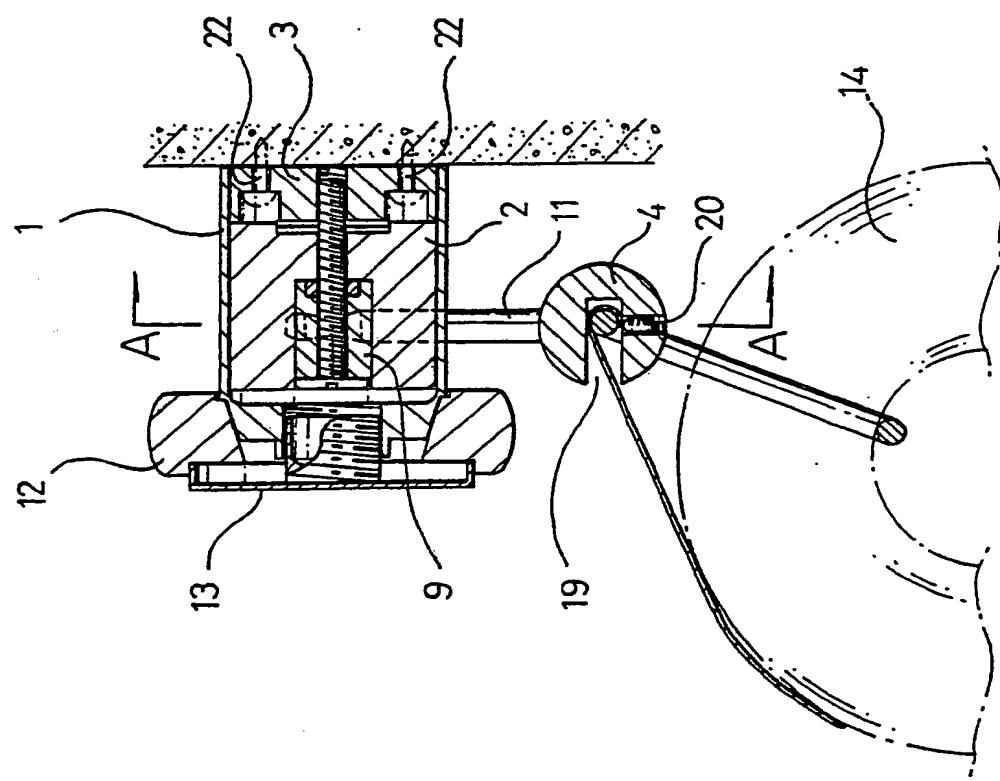


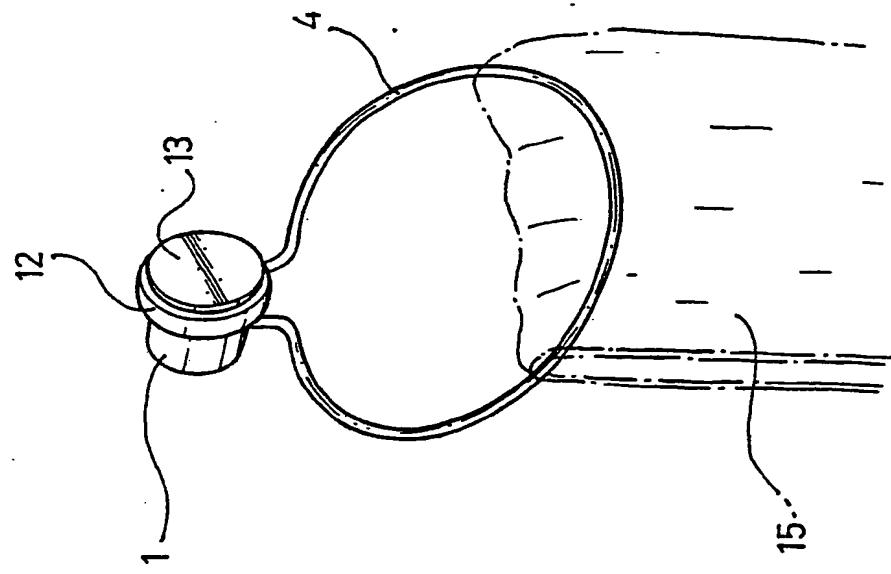
FIG 2



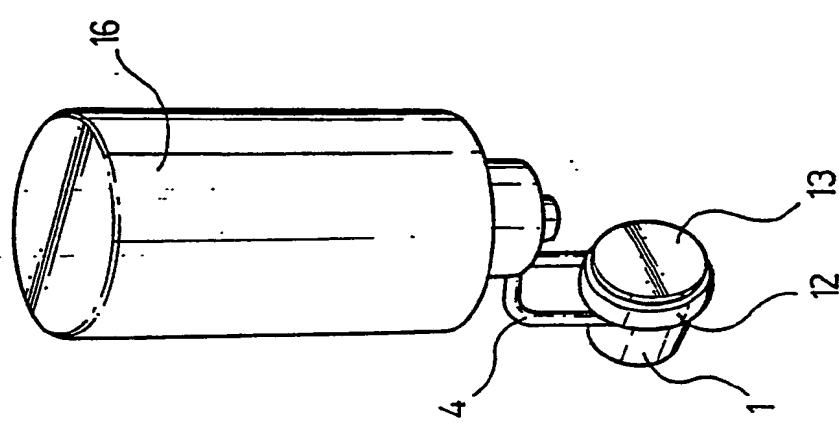
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FIG 4

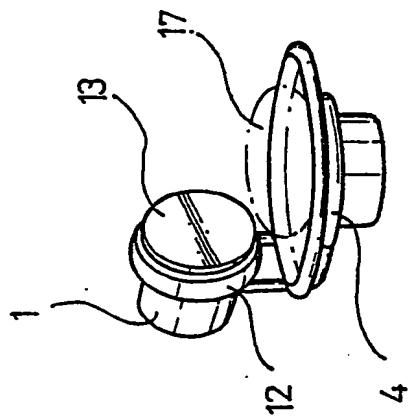
(A)



(B)



(C)



INTERNATIONAL SEARCH REPORT

International Application No. PCT/KR 91/00007

I. CLASSIFICATION OF SUBJECT MATTER (if several classification symbols apply, indicate all) *

According to International Patent Classification (IPC) or to both National Classification and IPC

Int. Cl. ⁵: A 47 K 10/00

II. FIELDS SEARCHED

Minimum Documentation Searched ?

| Classification System | Classification Symbols |
|-------------------------|---|
| Int. Cl. ⁵ : | A 47 K 1/08, 5/00, 5/02, 10/00, 10/02, 10/04, 10/06, 10/08, 10/10, 10/12, 10/14 |

Documentation Searched other than Minimum Documentation
to the Extent that such Documents are Included in the Fields Searched *

III. DOCUMENTS CONSIDERED TO BE RELEVANT*

| Category * | Citation of Document, ¹¹ with indication, where appropriate, of the relevant passages ¹² | Relevant to Claim No. ¹³ |
|------------|--|-------------------------------------|
| Y | FR, A, 2 063 344 (B. BROILLARD) 09 July 1971 (09.07.71), see claims 1,5,6; fig. 1,2. | (1,3) |
| Y | DE, A1, 1 906 613 (H. MERU) 01 October 1970 (01.10.70), see claim 4; fig, 1,5. | (1,3) |
| A | EP, A2, 0 067 343 (Roman DIETSCHÉ KG) 22 December 1982 (22.12.82), see claims 1,3,5; fig. 1,2. | (2) |

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IV. CERTIFICATION

Date of the Actual Completion of the International Search

13 August 1991 (13.08.91)

Date of Mailing of this International Search Report

21 August 1991 (21.08.91)

International Searching Authority

AUSTRIAN PATENT OFFICE

Signature of Authorized Officer



Anhang zum internatio-
nalen Recherchenbericht
über die internationale
Patentanmeldung

Nr.

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FR-A5- 2063344 09-07-71

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EP-A2- 67343 22-12-82

AT-E - 14831 15-08-85
DE-U1- 8117494 08-10-81
DE-CO- 3265408 19-09-85
EP-A3- 67343 20-04-83
EP-B1- 67343 14-08-85

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